



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,010	08/25/2000	Nobuyuki Tomihashi	20-4744P	5697

2292 7590 10/21/2003

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
----------

WILSON, DONALD R

ART UNIT	PAPER NUMBER
----------	--------------

1713

DATE MAILED: 10/21/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/623,010

Applicant(s)

TOMIHASHI ET AL.

Examiner

Donald R Wilson

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1713

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment and declaration filed on 9/11/03, have been fully considered with the following results.
2. The amendment overcomes the rejection under 35 U.S.C. § 112, second paragraph, and the rejection is withdrawn.
3. The amendment and declaration are not deemed to be persuasive in overcoming the prior art rejections, which are maintained for reasons discussed below.

### *Previously Cited Statutes*

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

### *Claim Rejections - 35 USC § 102/§ 103*

5. **Claims 10, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by EP'096.**

The basis of this rejection was stated in Detailed Action § 11-12 of the Office Action of 3/19/02, and was further discussed in Detailed Action § 7-9 of the Office Action of 10/24/02, and Detailed Action § 8-10 of the previous Office Action.

6. Applicant has amended the claims to now recite that the curing accelerators are salts of mono- or di-tertiary amines with organic or inorganic acids. This overcomes the anticipatory rejection based upon the disclosure in EP'096 of using BDU-b, a quaternary ammonium salt, as the curing accelerator. However, the rejection is still valid because EP'096 specifically teaches the use of a tertiary amine such as DABCO (diazabicyclooctane) as the cure accelerator, which makes its use clearly envisaged to one of ordinary skill in the art. As HF is known to be liberated during the cure with bisphenols or their salts, it would form a salt with the tertiary amine. Note that the instant specification teaches HF as one of the acids useful for forming a salt (instant specification, page 8, line 3). This was also pointed out in the last Office Action. Further, even if HF wasn't liberated, a tertiary amine acid salt in the presence of a phenoxide salt would be protonated by the tertiary amine acid salt to yield phenol, free amine and an acid

Art Unit: 1713

salt of the counterion in the phenoxide salt, i.e., phenoxide ion being a stronger base than a tertiary amine would result in an equilibrium reaction highly favoring phenol and free amine.

7. Applicant's argument persisting that DBU-b is a strong basic salt is noted, but besides being wrong is not relevant as the claim has been amended to recite an acid salt of a tertiary amine as opposed to a quaternary salt of a tertiary amine. The statement that DBU is a strong base, benzyl chloride is a neutral compound, and thus DBU-b is a strong basic salt, is lacking in logic and an appreciation of the chemistry. It is equivalent to saying that benzoic is an acid and ethanol is neutral therefore ethyl benzoate is an acid.

8. The declaration of Mr. Terasaka is not deemed to be persuasive for the following reasons.

a. The comparison is made with DBU-b as the vulcanizing aid, which the instant claims no longer read on.

b. Example 1 of the instant specification is said to use an octylate salt of 1,8-diazabicyclo-[5.4.0]-7-undecene, which would be quaternary ammonium salt, e.g., the product of a compound such as octyl chloride and 1,8-diazabicyclo-[5.4.0]-7-undecene, which is also not what the claims are directed to. (This is also noted in the European Search Report provided on 8/15/03 by applicant.)

c. The declaration is missing in detail as to what is being compared. For instance, the statement that a composition "--- was prepared in the same manner as in Example described in the specification --- except that DBU-b was used as a curing accelerator" (underlining added), leaves it open as to whether it was exactly the same condition or whether for instance different amounts of cross-linking agent, curing aid, curing time etc. were used.

9. **Claims 10, 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over EP 096 in view of Kometani'913, Sonoi'686 or Yamamoto'902.** The basis of this rejection was stated in Detailed Action § 14-15 of the Office Action of 3/19/02, and was further discussed in Detailed Action § 10-13 of the Office Action of 10/24/02, and Detailed Action § 11-13 of the previous Office Action.

10. Applicant relies on the traversal in the above rejection, which is not deemed to be persuasive for reasons discussed above.

Art Unit: 1713

***Objection to Disclosure***

11. The disclosure is objected to because of the following informalities: Applicant needs to amend the disclosure in order to conform to the amendment to Claim 10. This can be accomplished by deleting "quaternary" at page 7, line 6, and page 8, line 3. Appropriate correction is required.

***Action Is Final***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. This application contains Claims 1-9 and 11 drawn to an invention nonelected with traverse in Paper No. 6. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Other Comments***

15. Applicant's request for an interview is noted. If applicant still wishes an interview he is invited to phone the Examiner for an appointment. The time to request an interview is not when the Examiner is in the middle of considering applicant's response and writing an Office Action.

16. In regards to the IDS of 11/21/02, an initialed copy was returned with the Office Action of 2/5/03, as was indicated on the Summary Sheet. However, another copy is enclosed for applicant.

***Future Correspondence***

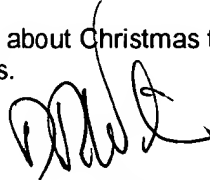
Any inquiry concerning this communication or earlier communications from the examiner should be directed to D.R. Wilson whose telephone number is 703-308-2398 (571-272-1113).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 703-308-2450 (571-272-1114). The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications. The unofficial direct fax phone number to the Examiner's desk is 703-872-9029 (571-273-1113).

Art Unit: 1713

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-2351.

The Examiner is expected to move to the new Office about Christmas time. New telephone numbers known to the Examiner are indicated in parentheses.

A handwritten signature in black ink, appearing to read 'D. R. Wilson', is positioned above the printed name.

D. R. Wilson  
Primary Examiner  
Art Unit 1713